

Application No. 10/020,861

REMARKS

1. Claims 1-6, 9-10, and 12-24 are pending. By this Amendment, claims 5, 6, 10, 12, 14, 17, and 18 are amended, no claims are added, and claim 25 is canceled.

2. For clarity the claim amendments are presented below, deleted subject matter either in **strikeout** or enclosed in double brackets and inserted subject matter underlined.

5. (Thrice Amended) A transport unit for wafer-shaped objects, the unit comprising:

a container for holding the objects, the container comprising a plurality of container walls, the container walls having a plurality of recesses, and

a container door fitted in said container and comprising two door walls spaced apart from each other and a locking and unlocking arrangement positioned between the two door walls, the locking and unlocking arrangement comprising a plurality of locking elements movable between a moved-in end position and a moved-out end position, each of said plurality of locking elements comprising a projection from a plate with a pair of opposed edges, each of said plurality of locking elements directed to one of said plurality of recesses in said container **[[wall]] walls**, whereby in the moved-out end position the locking elements penetrate into said recesses in the container walls, the locking and unlocking arrangement further comprising a plurality of parallel couplers pivotally mounted to one of the door walls and to each of said plate edges such that each of said plates is parallel to the door walls, whereby the penetration of each of said locking elements into one of said plurality of recesses is effected along a curved path.

6. (Twice Amended) The transport unit of claim 5 wherein each said locking element is a component part of ~~the plate~~ one of said plates.

10. (Thrice Amended) The transport unit of claim 5 further comprising a plurality of connecting rods, wherein each of said plurality of connecting rods has two ends with one end ~~of each displacing element~~ each connecting rod rotatably connecting to one of the [[plate]] plates and the other end of each connecting rod coupled to ~~the locking element~~ a disk.

12. (Thrice Amended) A transport unit for wafer-shaped objects, the transport unit comprising a container and a door to close the container, the door comprising a pair of **[[, ]]** spaced apart door walls and a locking and unlocking arrangement

Application No. 10/020,861

positioned between the door walls, the locking and unlocking arrangement comprising:

first and second plates, each of said first and second plates comprising a locking element extending therefrom and first and second opposed edges, each of said locking elements extendable out of the door to engage a recess in the container, at least one of said locking elements extending in a first locking element direction and at least one other of said locking elements extending in a second locking element direction to engage the recesses in the container, the first locking element direction generally opposite to the second locking element direction;

a rotatable disk and a plurality of connecting rods, the rotatable disk in rotatable mechanical communication with each of the locking elements via the connecting rods; and

first and second parallel couplers pivotally attached to ~~each edge~~ first and second edges of each of said plates, each of said couplers having two ends, one end of each of said couplers attached to and rotatable about a first coupler axis at one of the ~~parallel door~~ walls and the other end of each of said couplers attached to and rotatable about a second coupler axis generally parallel to the first coupler axis and proximate one of said locking elements, said first and second couplers attached to the first plate axially extending in a first coupler direction and said first and second couplers attached to said second plate axially extending in a second coupler direction different from the first coupler direction such that the locking elements remain generally parallel to said door walls and are displaced outwardly in a curved path.

14. (Twice Amended) The transport unit of claim 13 wherein the connecting ~~rod extends~~ rods extend between the disk and the plate.

17. (Twice Amended) The transportable unit of claim 16, wherein each of said couplers is rotatably connected to one of the ~~door~~ walls along a first axis parallel to the ~~door~~ wall and each of said couplers is further rotatably connected at one of the locking elements with a second axis parallel to the first axis, the couplers providing the curved path of the locking element.

18. (Thrice Amended) A container door fitted in a container and having a pair of door walls and a locking and unlocking arrangement disposed between the pair of door walls, the locking and unlocking arrangement comprising a plurality of projections and a disk rotatable by a motor and in mechanical communication with each of said plurality of projections, each of said plurality of projections extending from a plate having opposed edges and held operably parallel to the door walls by a plurality of parallel couplers, each of said plurality of couplers pivotally attached to one of said door walls and further pivotally attached proximate ~~[[each]]~~ one of said plate opposed edges, the projections each movable in a curved path between a moved-in state and a moved-out state by a cooperation

Application No. 10/020,861

between the disk and couplers, whereby in the moved-out state the locking elements penetrate into said recesses in the container walls, wherein the projections remain substantially parallel to said door walls.

By being amended to recite "walls" rather than "wall," the former having antecedence, claim 5 is amended to more particularly point out and distinctly claim the subject matter regarded as the invention.

Claim 6 is amended to recite "each said locking element" and "one of said plates," in place of "the plate," to more particularly point out and distinctly claim the subject matter regarded as the invention.

Claim 10 is amended to more particularly point out and distinctly claim the subject matter regarded as the invention by reciting the relation between each connecting rod, the disk and the plates.

Claim 12 is amended to more particularly point out and distinctly claim the subject matter regarded as the invention by reciting "first and second edges" in place of "each edge" and by reciting "door walls" in place of "parallel door walls."

Claim 14 is amended to more particularly point out and distinctly claim the subject matter regarded as the invention by reciting "rods extend," rather than "rod extends," the former having more clear antecedence.

Claim 17 is amended to more particularly point out and distinctly claim the subject matter regarded as the invention by reciting "door walls" rather than "walls" and by reciting "one of the locking elements," in place of "the locking elements."

Application No. 10/020,861

Claim 18 is amended to more particularly point out and distinctly claim the subject matter regarded as the invention by reciting "one of said plate opposed edges," rather than "each of said plate opposed edges."

No new matter has been added by the amendments to the claims. None of the foregoing amendments is believed to narrow the scope of the amended claims and none of the foregoing amendments has been made responsive to a rejection in view of prior art or the Recapture Rule.

3. Responsive to the statement in the Office Action, Applicants acknowledge that a statement addressing the loss or inaccessibility of the original patent must be provided before this reissue application is allowed.

35 U.S.C. § 251

4. Claims 5, 6, 9, 10, and 12-25 are rejected under 35 U.S.C. § 251 as an improper recapture of broadened claimed subject matter asserted to be surrendered in the application for U.S. Patent 6,000,732.

4a. Regarding pending claims 5, 12, 16, 18, 19, and 25, the rejection asserts that the non-Final Office Action (Paper No. 13) rejected claims under 35 U.S.C. § 102(b) in view of U.S.P.N. 3,421,471 to Richter, including examiner's statement that claimed container door's "spaced walls" did not patentably define from the perpendicularly-arranged walls of the reference's container door and otherwise indicating claim limitations being anticipated by the prior art. In response to that rejection, the independent claim 9 [now claim 1 of U.S. Patent 6,000,732] was amended to include terminology of "and parallel" to further define the container walls' arrangement:  
"a container door fitted in said container and comprising two walls, spaced apart from and parallel to each other".

Application No. 10/020,861

Applicant's arguments filed with that amendment specifically indicate that Applicant relies on the new limitation in order to patentably define from the prior art: see page 4 of Applicant's response (Paper No. 15) filed June 25, 1999.

- 4b. With respect to claim 9 [now claim 1 of U.S. Patent 6,000,732] the rejection also states:

The claim was additionally amended at that time to specifically require that the claimed means for locking and unlocking the claimed container door was located between two "parallel" walls:

"means for locking and unlocking said container door comprising locking elements provided within said container door between said two parallel walls and being displaceable into a moved - in end and into a moved - out end position and, when moving out, penetrates into said recesses within the container walls".

Applicant's arguments filed with that amendment specifically indicate that Applicant relies on the new limitation in order to patentably define from the prior art: see page 4 of Applicant's response (Paper No. 15) filed June 25, 1999.

- 4c. With respect to claim 9 [now claim 1 of U.S. Patent 6,000,732] the rejection further states:

The claim was additionally amended at that time to specifically require specific structural arrangement of claimed locking elements, plates, rotatable disk, and motor:

"every locking element being in the form of a projection from a plate which is directed parallel to the outwardly directed wall of said container door, wherein all plates share a common drive in form of a rotatable disk driven by a motor and acting in the locking and unlocking direction for connecting rods provided for displacing the plates, the plates being fixed in the moved - in end position and in the moved - out end position by said connecting rods".

Applicant's arguments filed with that amendment specifically indicate that Applicant relies on the new limitation in order to patentably define from the prior art: see page 4-5 of [Applicant's] response (Paper No. 15) filed June 25, 1999.

- 4d. With respect to claim 9 [now claim 1 of U.S. Patent 6,000,732] the rejection still further states:

The claim was additionally amended at that time to specifically require other structural features of the "means for providing a curved path" including

Application No. 10/020,861

particulars of that claimed element including its arrangement as regards each of the plurality of plate structures and couplers:

"said means for providing for providing [sic] a curved path further comprising structure to maintain and move every [locking element] plate parallel to an outwardly directed wall of said two parallel walls of the container door [and includes] by means of couplers, said couplers for every plate being [connected thereto which are] parallel to each other and [which are] rotatably [supported at the locking element] connected to said plate and also to said outwardly directed wall so that, as a result of the couplers, there is a predetermined distance between [the locking element] every plate and said outwardly directed wall in the moved - in state, which distance decreases during the outward movement until the locking element comes into contact with a contact surface in the recess against which the locking element is pressed in its moved - out end position".

Applicant's arguments filed with that amendment specifically indicate that Applicant relies on the new limitation in order to patentably define from the prior art: see page 5 of Applicant's response (Paper No. 15) filed June 25, 1999.

5. Applicants respectfully traverse this rejection, respectfully pointing out that reliance on a limitation added during prosecution to obtain allowance does not necessarily invoke the Recapture Rule.

If a reissue application is filed within two years of the issue date of a patent to be corrected, the statute allows for the claim to be broadened during prosecution.<sup>1</sup> While subject matter properly classified under the Recapture Rule must sometimes be present in a reissue claim, not all limitations added to all claims during prosecution of the original patent are subject to the Recapture Rule and, thus, need not be present in the reissue claim.<sup>2</sup> Stated otherwise, not

<sup>1</sup> 35 U.S.C. § 251, ¶ 4 ("No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.").

<sup>2</sup> Ex parte Eggert, 67 USPQ2d 1716, 1723 (Bd. Pat. App. & Inter. 2003) (The examiner contends that the Recapture Rule prohibits a patentee from obtaining in reissue any claim which does not include each and every limitation added to a claim or argued by an applicant during the prosecution of the original patent application in order to overcome a rejection and obtain a patent.... This approach, while certainly relatively simple in its application, has been expressly rejected by the Court of Customs and Patent Appeals (CCPA) and the Court of Appeals for the Federal Circuit (Federal Circuit).").

Application No. 10/020,861

all limitations added to a claim during prosecution are subject to the Recapture Rule; and moreover, limitations subject to the Recapture Rule may be absent if other limitations are narrower in scope. Indeed, the proper focus is on the scope of the claims in the original patent, not individual limitations.<sup>3</sup>

The Recapture Rule may be properly invoked only if the subject matter at issue has been surrendered by Applicants.

Surrendered subject matter must have been conceded by Applicants as unpatentable. However to have been conceded as unpatentable, subject matter in a claim must have been rejected and Applicants must have conceded that the subject matter was unpatentable by further amending the claim. Subject matter added to a claim in the final amendment before allowance may not be properly classified within the ambit of recapture subject matter. The scenario described in Ex parte Eggert,<sup>4</sup> a 2003 presidential opinion of the U.S. Board of Patent Appeals and Interferences, provides an excellent explanation of when subject matter is conceded by Applicants as unpatentable. In Eggert, the U.S. Patent and Trademark Office Board of Appeals and Interferences was asked to impose a per se rule to prevent appellants from "retreating" from "any claim limitation determined to have secured allowance of the original patent."<sup>5</sup> The Board

<sup>3</sup> Ex parte Eggert, 67 USPQ2d 1716, 1724 (Bd. Pat. App. & Inter. 2003) ("Ball also establishes that '[t]he proper focus is on the scope of the claims, not on the individual feature or element purportedly given up during prosecution of the original application.'").

<sup>4</sup> Ex parte Eggert, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003).

<sup>5</sup> Ex parte Eggert, 67 USPQ2d 1716, 1717 (Bd. Pat. App. & Inter. 2003) ("In the request for rehearing, it appears that the examiner has asked this Board to impose a per se rule of reissue recapture to prevent appellants from retreating from any claim limitation determined to have secured allowance of the original patent. For the reasons set forth below, we decline to do so.).

Application No. 10/020,861

declined to do so.<sup>6</sup> Once amended claim 1 was rejected as obvious. The appellants then amended claim 1 a second time. Twice amended claim 1 was allowed by the Examiner.<sup>7</sup> By amending claim 1 a second time, the appellants conceded that claim 1, once amended, was unpatentable.<sup>8</sup> However, the subject matter intermediate between once amended claim 1 and twice amended claim 1 was not conceded as unpatentable because the Examiner was never directly presented with a claim intermediate in scope between once amended claim 1 and twice amended claim 1.<sup>9,10</sup> Hence, conceded subject matter is determined by the scope of a given

---

<sup>6</sup> Id.

<sup>7</sup> Ex parte Eggert, 67 USPQ2d 1716, 1717 (Bd. Pat. App. & Inter. 2003) ("There came a time in the prosecution of the '992 application that claim 1 (once amended) ... was met by a final rejection from the examiner.... At that time, appellants ... amended claim 1 a second time. Upon consideration of claim 1 (twice amended), the examiner determined that it was patentable. Thus, claim 1 (twice amended) became issued claim 1.").

<sup>8</sup> Ex parte Eggert, 67 USPQ2d 1716, 1717 (Bd. Pat. App. & Inter. 2003) ("Another [option] was to concede that rejected claim 1 (once amended) was unpatentable and to amend that claim in an attempt to define narrower, patentable subject matter.").

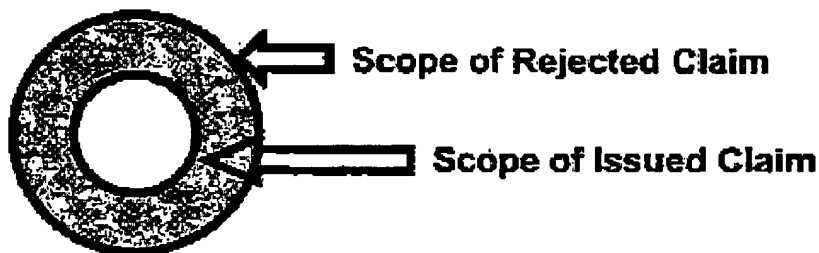
<sup>9</sup> Ex parte Eggert, 67 USPQ2d 1716, 1717 (Bd. Pat. App. & Inter. 2003) ("The changing scope of a claim during the administrative examination process as it is amended to overcome prior art rejections can be viewed as a series of concentric circles. As illustrated in Drawing 1, the scope of rejected claim 1 (once amended) is the outer circle and the scope of amended issued claim 1 (twice amended) is the inner circle. The shaded area between the circles represents subject matter which is only narrower than the scope of the rejected claim but only broader than the scope of the issued claim. In our view, the surrendered subject matter is the outer circle of Drawing 1 because it is the subject matter appellants conceded was unpatentable. The subject matter of the shaded area was not subject to the administrative examination process as the examiner was never directly presented with a claim which fell within the scope of the shaded area. Thus, appellants have never conceded that a claim falling within the scope of the shaded area of Drawing 1 is unpatentable and therefore, in our view, such subject matter is not barred by the Recapture Rule.").



Application No. 10/020,861

claim before being amended into allowable form.<sup>11</sup> Stated otherwise, the subject matter in the canceled claim before being allowed is subject matter subject to the Recapture Rule. In summary, the subject matter recited in a claim before being amended into allowable form is conceded as unpatentable and is surrendered under the Recapture Rule; however, subject matter added to the claim after the final claim amendment is not barred by the Recapture Rule.

Applicants next refer to the MPEP for support in Applicants' contention that the limitations cited in the rejection are not surrendered subject matter subject to the Recapture Rule. Section 1412.02 of the MPEP contains a comprehensive discussion pertaining to the Recapture Rule. For example, MPEP section 1412.02(I)(B) states,



**Drawing 1**

<sup>10</sup> Ex Parte Eggert, 67 USPQ2d 1716, 1718 (Bd. Pat. App. & Inter. 2003) ("For example, if an outer circle claim contains elements ABC and the inner circle claim contains elements ABCDEF, a reissue applicant cannot recapture a claim directed to elements ABC (outer circle) or a claim entirely outside the outer circle (e.g., AB, BC, ABCBR2, etc.). However, it is our view that the reissue recapture rule is not invoked for claims directed to elements ABCX, ABCDBR, ABCEF, ABRBCDEF. In other words, the focus for determining the reach of the reissue recapture rule should be the claim from which the issued claim directly evolved, not the issued claim itself.").

<sup>11</sup> Ex parte Eggert, 67 USPQ2d 1716, 1724 (Bd. Pat. App. & Inter. 2003) ("In Mentor [citation omitted] the Federal Circuit reiterated its statement from Ball that "[t]he Recapture Rule bars the patentee from acquiring, through reissue, claims that are of the same or of broader scope than those claims that were cancelled from the original application....") (emphasis added).

Application No. 10/020,861

Where a claim in a reissue application is broadened in some respect as compared to the patent claims, the examiner must next determine whether the broadening aspect(s) of that reissue claim relate(s) to subject matter that applicant previously surrendered during the prosecution of the original application (which became the patent to be reissued).

Section 1412.02 then proceeds to support Applicants' contention that the subject matter at issue was not surrendered and is not subject to the Recapture Rule because this subject matter was amended into the rejected independent claims just before they were allowed. The foregoing portion of the MPEP states that claim limitations in broader form than those issued are not properly rejected under the Recapture Rule, thus supporting Applicants' contention that broader forms of limitations added/argued to overcome an art rejection may not necessarily be rejected under the Recapture Rule.<sup>12</sup> To this end, it is Applicants' belief that all of the limitations at issue above were amended into claim 9 of the application in Paper No. 15, wherein claim 9 was then allowed. It is also Applicants' belief that all limitations present in claim 1 of U.S. Patent 6,000,732 (claim 9 as prosecuted) - albeit in arguably broader form in some of the pending claims - are present in the pending independent claims.

---

<sup>12</sup> MPEP § 1412.02(I)(C) (page 14-20) (8th Ed., Rev. 3 August 2005) ("Second, it must be determined whether the reissue claim entirely omits any limitation that was added/ argued during the original prosecution to overcome an art rejection. Such an omission in a reissue claim, even if it includes other limitations making the reissue claim narrower than the patent claim in other aspects, is impermissible recapture. Pannu v. Storz Instruments Inc., *supra*. However, if the reissue claim recites a broader form of the key limitation added/argued during original prosecution to overcome an art rejection (and therefore not entirely removing that key limitation), then the reissue claim may not be rejected under the recapture doctrine. Ex Parte Eggert, 67 USPQ2d 1716 (Bd. Pat. App. & Inter. 2003) (presidential). For example, if the key limitation added to overcome an art rejection was 'an orange peel,' and the reissue claim instead recites 'a citrus fruit peel', the reissue claim may not be rejected on recapture grounds.") (emphasis in original).

Application No. 10/020,861

To summarize, all limitations from issued claims must be present in reissue claims; however, the limitations may be present in broadened form. These broadened limitations are not subject to the Recapture Rule if they were amended into the claim in the manner described above. Moreover, if other limitations in the reissue claim are narrower in scope than those in the originally allowed claim, the Recapture Rule may be avoided.

None of the claim amendments at issue is subject to the Recapture Rule

During the prosecution of U.S. Patent 6,000,732, claim 9 (claim 1 in the issued patent) was amended in Paper No. 15, filed 21 June 1999, as asserted in the Office Action. The amendments to, and arguments supporting the patentability of, claim 9 in Paper No. 15 included each and every claim limitation cited above in the Office Action as a basis for rejection under the Recapture Rule. In making these amendments, Applicants arguendo may have conceded that the subject matter of claim 9, before being amended into allowable form, was not patentable. However, the subject matter amended into the allowable form of claim 9 in Paper No. 15 was not conceded as essential for patentability and thus, is not subject to the Recapture Rule.

The limitation discussed above at 4a was indeed present in the amendment in Paper No. 15, wherein "a container door fitted in said container and comprising two walls, spaced apart from and parallel to each other" was amended into claim 9. Therefore, this limitation is not subject to the Recapture Rule.

The limitation discussed above at 4b was also present as an amendment in Paper No. 15, wherein

means for locking and unlocking said container door comprising locking elements provided within said container door between said two parallel walls and being displaceable into a moved - in end position and into a moved - out end position and, when moving out, penetrate into said recesses within the container walls

Application No. 10/020,861

was amended into claim 9, which was then allowed. Hence, this limitation is not subject to the Recapture Rule.

The limitation discussed above at 4c was also present as an amendment in Paper No. 15, in which

every locking element being in the form of a projection from a plate which is directed parallel to the outwardly directed wall of said container door, wherein all plates share a common drive in form of a rotatable disk driven by a motor and acting in the locking and unlocking direction for connecting rods provided for displacing the plates, the plates being fixed in the moved - in end position and in the moved - out end position by said connecting rods

was amended into claim 9, which was then allowed. Therefore, this limitation is not subject to the Recapture Rule.

The limitation discussed above at 4d was also present as an amendment in Paper No. 15, wherein

said means for providing for providing a curved path further comprising structure to maintain in move every [locking element] parallel to an outwardly directed wall of said to parallel walls of the container door [and includes] by means of couplers, said couplers for every plate being [connected thereto which are] parallel to each other and [which are] rotatably [supported at the locking element] connected to said plate and also to said outwardly directed wall so that, as a result of the couplers, there is a predetermined distance between [the locking element] every plate and said outwardly directed wall in the moved - in state, which distance decreases during the outward movement until the locking element comes into contact with a contact surface in the recess against which the locking element is pressed in its moved - out end position

was amended into claim 9 as well. Claim 9 was then allowed in the subsequent notice of allowance. Hence, this limitation is not subject to the Recapture Rule.

Each of the foregoing claim amendments cited to support the Recapture Rule rejection in the Office Action was present in the amendment, which amended claim 9 into the form allowed. Hence, Applicants have not surrendered this subject matter as unpatentable. Therefore, none of the foregoing claim limitations cited in support of the rejection are subject to the Recapture Rule.

Application No. 10/020,861

Because none of the foregoing claim limitations can be properly cited to support the Recapture Rule rejection, reconsideration and withdrawal of the rejection are respectfully requested.

6. While none of the foregoing claim limitations are subject to the Recapture Rule, Applicants respectfully point out the "parallel door walls" are inherently present in claims 5, 12, 18, and 19. Claim 5 recites "each of said plates is parallel to the door walls." Claim 12 recites "the locking elements remain generally parallel to said door walls." Claim 18 recites "wherein the rejections remain substantially parallel to said door walls." Claim 19 recites "each of said plurality of locking elements is functionally parallel to the door walls."

7. We have recently encountered a very similar issue when prosecuting another reissue patent application, in which confusion arose as to what claim amendments were subject to the Recapture Rule and in which an appeal brief was filed. After reviewing the appeal brief, the rejections for improper recapture were withdrawn and the reissue claims were allowed. The Examiner is respectfully referred to publicly available U.S. Patent Application 09/862,905, filed 22 May 2001, the image file wrapper of which contains the appeal brief and the subsequent withdrawal of the rejections for improper recapture.


#### Conclusion

8. For reasons stated, none of the foregoing limitations are subject to the Recapture Rule. Moreover, no rejections have asserted that any of the pending claims are unpatentable due to anticipation or obviousness. Therefore, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully

Application No. 10/020,861

requested. The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

  
Wm. Larry Alexander, Ph.D.  
Registration No. 37,269

Customer No. 24113  
Patterson, Thunte, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 349-5757